

In re Patent Application of
ESPOSITO CORCIONE ET AL.
Serial No. 10/696,723
Filing Date: October 29, 2003

In the Claims:

Claims 1-9 (Previously Cancelled).

10. (Previously Added) A parallel configuration system for a hybrid propulsion vehicle comprising:

an electric engine;

an internal combustion engine operating at a steady state; and

a transmission system for receiving a driving thrust that is distributed between said electric engine and said internal combustion engine, and for delivering torque from said electric engine and said internal combustion engine to wheels of the vehicle.

11. (Previously Added) A system according to Claim 10, wherein said internal combustion engine comprises a diesel engine.

12. (Previously Added) A system according to Claim 10, wherein said internal combustion engine operates at an operating point that increases efficiency while reducing consumption and emissions.

13. (Previously Added) A system according to Claim 10, wherein said transmission system has a continuously variable reduction ratio.

14. (Previously Added) A system according to Claim 13, wherein said transmission system comprises a belt converter rotating on expanding pulleys.

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15. (Previously Added) A system according to Claim 14, wherein said belt converter comprises a metallic and segmented belt.

16. (Previously Added) A system according to Claim 14, wherein a diameter of said pulleys is automatically varied by a hydraulic system associated with said transmission system, the hydraulic system being driven by a control unit.

17. (Previously Added) A system according to Claim 10, further comprising:

at least one battery for said electric engine; and
a control unit for managing distribution of torque from said internal combustion engine, and for recharging said at least one battery.

18. (Previously Added) A hybrid propulsion vehicle comprising:

an electric engine;
an internal combustion engine operating at a steady state;
at least one axle; and
a transmission system for receiving a driving thrust that is distributed between said electric engine and said internal combustion engine, and for delivering torque from said electric engine and said internal combustion engine to said at least one axle.

19. (Previously Added) A vehicle according to Claim 18, wherein said internal combustion engine comprises a diesel engine.

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20. (Previously Added) A vehicle according to Claim 18, wherein said internal combustion engine operates at an operating point that increases efficiency while reducing consumption and emissions.

21. (Previously Added) A vehicle according to Claim 18, wherein said transmission system has a continuously variable reduction ratio.

22. (Previously Added) A vehicle according to Claim 21, wherein said transmission system comprises a belt converter rotating on expanding pulleys.

23. (Previously Added) A vehicle according to Claim 22, wherein said belt converter comprises a metallic and segmented belt.

24. (Previously Added) A vehicle according to Claim 22, wherein a diameter of said pulleys is automatically varied by a hydraulic system associated with said transmission system, the hydraulic system being driven by a control unit.

25. (Previously Added) A vehicle according to Claim 18, further comprising:

at least one battery for said electric engine; and
a control unit for managing distribution of torque from said internal combustion engine, and for recharging said at least one battery.

26. (Previously Added) A method for delivering

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torque in a hybrid propulsion vehicle comprising an electric engine and an internal combustion engine connected together in parallel, the method comprising:

using a transmission system for receiving a driving thrust that is distributed between the electric engine and the internal combustion engine, and for delivering torque from the electric engine and the internal combustion engine to wheels of the vehicle while the internal combustion engine operates at a steady state.

27. (Previously Added) A method according to Claim 26, wherein the internal combustion engine comprises a diesel engine.

28. (Previously Added) A method according to Claim 26, wherein the internal combustion engine operates at an operating point that increases efficiency while reducing consumption and emissions.

29. (Previously Added) A method according to Claim 26, wherein the transmission system has a continuously variable reduction ratio.

30. (Previously Added) A method according to Claim 29, wherein the transmission system comprises a belt converter rotating on expanding pulleys.

31. (Previously Added) A method according to Claim 30, wherein the belt converter comprises a metallic and segmented belt.

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32. (Previously Added) A method according to Claim 30, wherein a diameter of the pulleys is automatically varied by a hydraulic system associated with the transmission system, the hydraulic system being driven by a control unit.

33. (Previously Added) A method according to Claim 29, wherein the vehicle further comprises at least one battery for the electric engine; and a control unit for managing distribution of torque from the internal combustion engine, and for recharging the at least one battery.